Available online at www.sciencedirect.com
ScienceDirect
Procedia - Social and Behavioral Sciences 174 (2015) 3663 – 3667
Procedia
Social and Behavioral Sciences

INTE 2014

Online learning in vocational school: focus on students' perceptions

Sinan Aydin[a,*] , Yaşar Akkan[b], Ercan Arpaz[c], Bülent Koparan[d]

[a,c,d] *Kocaeli University, Kocaeli Vocational High School, Kocaeli, Turkey*
[b] *Gümüşhane University, Engineering Faculty, Gümüşhane, Turkey*

Abstract

In this study, we describe vocational school students' practices and perceptions of online learning based on interviews and observations. First, we identify student characteristics within online classes. Then, we report student perceptions of online lectures. Finally, we summarize our recommendations to improve the online teaching. The methodology used in this study was qualitative data-collection techniques to obtain vocational school student views on online education and educational processes. For this purpose, two stages of data collection were used in this study these were one-on-one open-ended interviews and think-aloud observation.

According to data analysis from this study, communication between students and teachers has a basic effect on shaping students' perceptions and approach to online learning. Also, they have some negative ideas of using and implementations of technology in lectures. Included in this finding is that the meaning assigned by students to any technological material used in lectures is directly connected with the way this material is implemented. Another important finding is that planning of course, assessment and curriculum plays basic role in student's concentrate on lectures and success in online learning.

We investigated only a few of the possible relationships between perception of the online environment, the technological materials used in lectures, students' approach to online learning, and students' perceptions of this learning way. Although Web resources and community were mentioned in this study, they may play a more effective role in student online learning than was analyzed in this study. Some additional factors that may effect student perceptions needed to be investigated are the link between perception and outcome, faculty use and knowledge, faculty perceptions and training.

Peer-review under responsibility of the Sakarya University

Keywords: online learning; students' perception; vocational school; technological material

* Corresponding author. Tel: +90 507 261 65 72; Fax: +90 262 349 39 97.
E-mail address: sinanaydin1704@yahoo.com

Peer-review under responsibility of the Sakarya University
doi:10.1016/j.sbspro.2015.01.1087

1. Introduction

Online learning is a new generation of learning (Spender, 2001). It is a more recent approach to the method of education, offering the learner more control over the learning process (Acton et al., 2005). This service can be delivered by a variety of electronic media, including internet, interactive TV and satellite (Govindasamy, 2001). In this study online learning offers a means of self-directed education with improved learning through interactivity between teacher and student.

Information and Communication Technologies (ICTs) provide new systems for the creation of innovative environments of teaching and learning, by re-defining the educational models all over the world during the recent years. This mean that individualized learning through online education is developing as a major area especially in higher education. In addition to its new opportunities, ICTs offer new challenges for both teachers and students. It is essential that we have an understanding of the practices and perceptions of an effective online student in connection with the growing number of online courses (Redmond, 2011). Laurillard (2002) emphasized that "if there is to be innovation and change in university teaching—as the new technology requires, as the knowledge industry requires, and as students demand—then it follows that academics must become researchers in teaching" (p. 22).

Research in the area of online education is growing. Some basic research questions in this area are as follow. How will students, teachers and universities handle online education? What kind of teaching methods could be best approach for online students' needs? How do student perceptions impact their actions, approaches, and learning within the online education system?

This paper explores vocational school students' practices and perceptions of online learning based on interviews and observations. We describe learner characteristics within online lectures, and analyze how vocational school students' perceptions of the online education. Than we summarize our recommendations on the positive and negative aspects of online lectures, and on the improving of online teaching.

2. The role of the online learning

Developing online learning systems is becoming a basic part of education modules for many universities. They apply new ways to attract students not only in traditional education but also in the online teaching. Armstrong (2011) stated that it is important to ensure high levels of student learning and by achieving a better understanding of students' needs in relation to their online learning. He argued, "By investigating ways that students perceive and interact with the learning environment, it may be that the design of the online learning environment can be better developed to support learning" (p. 223).

The online teaching strategies have been an effective area of discussion for researchers. As the general view of higher education changes, the incorporating of technological materials into educational structures has become more essential. The study (Smith and Ferguson, 2002) investigated the differences between online teaching and classroom instruction. The sample included 21 teachers who taught in both the traditional classrooms and online teaching formats. According to the authors, most teachers were trained in traditional teaching strategies and lack the experience and training in online teaching systems.

Menchaca and Bekele (2008) conducted a qualitative study on learner and instructor position in online teaching module. They stressed that significant differences exist between traditional classroom teaching and online teaching. Menchaca and Bekele determined five factors to develop a framework for an effective online learning, which include human factors, course factors, leadership factors, technology factors, and pedagogic factors. According to them, these factors are essential to provide an effective and challenging environment that supports an interactive teaching in an online environment. Wojnar (2002) preformed a study on the best practice model of online teaching and learning. He conducted a qualitative case study that included a sample of six students. In this study, Wojnar stressed that many online courses do not have a pedagogical approach. An important finding of his study is that pedagogical design is an essential factor in developing an effective online learning.

3. Methodology

3.1. Participants

Data were collected in the summer academic session of 2012-2013 at the distance education web page of Kocaeli vocational high school. The sample consisted of 18 vocational school students who were enrolled currently in the business and accounting departments at the university. The high school is a medium-size, private vocational high school with a student population of approximately 4,500. The population has a male to female ratio of 55% to 45%, and about 25% of the students identify themselves as persons of color. Almost 60% of students are from Kocaeli, with the others coming from İstanbul and throughout Turkey. Between 35% and 40% of the students receive some form of financial aid: scholarships, grants, or loans.

Students participated in the data-collection methods; these were 18 in the interview process and 15 in the think-aloud observations: 8 in the business department and 8 in the accounting department. Student participants were mostly in their mid-25s; 9 were female, and 9 were male. Fifteen students participated in two of the data-collection methods, and all students participated in only one data-collection method.

3.2. Materials and Procedure

The methodology used in this study was derived primarily from research into student learning, in the tradition of Biggs (1987), Entwistle & Ramsden(2002), and Armston (2011). The perspective of the student regarding both the process and outcomes of learning and instruction is analyzed in this approach. Qualitative data-collection techniques were used to obtain and describe vocational student views on online learning, online learning materials, and instructional processes. One-on-one open-ended interviews and think-aloud observation were used in this study for data collection. Data from think-aloud observations were used to confirm findings from the interviews.

4. Findings

The framework of approach to learning is used to analyze the data collected for this study. Three approaches to learning as described in Entwistle and Ramsden (1983). are called “deep,” “strategic,” and “surface.” Strategic learning is sometimes called “approaching,” depending on the nature of the study. Deep learning is defined as examining new facts and ideas critically, and making numerous links between ideas. Characteristics of deep learning include: looking for meaning, focusing on the central argument, researching of concepts needed to solve a problem and linking course content to real life. According to the authors, the strategic learner is a student who intends to achieve the highest grade possible through effective time management and organized study materials.

We examined participants’ responses in interviews, and think-aloud observations; categorization of responses was based on the tools mentioned, statements of value, and perceptions of positive or negative effect on learning. The think-aloud observations served to confirm or add insights to data collected during the interview process. Analysis of the data from interviews, and think-aloud observations can be categorized as three major findings;

- the role of communication in shaping perceptions of students
- how technology is used
- the role of course planning for students success

The role of communication in online learning was determinative in every data-collection method. Students stated a strong desire for directions on everything from assessments to school environment. All of the participants stated that they felt a lack of educational conversation with instructors. How teachers communicate online determined the meaning of online learning for students. Most of the students perceived communication as “a restricted connection”, so they changed their approach to learning adopting a more flexible learning styles; strategic learning or surface learning.

In interviews, and think-aloud observations, participants did not perceive the negative attributes of technology to be inherent in the technology, but they explained some troubles about its use and implementation. The basic expectation of the student was that communication technologies would be used in ways familiar to them and in providing a response to their educational needs. Some participants mentioned technology implementation problems in association with the lack of organizational structure found in some online lectures. Also, all participants used effectively net searching system to gather lecture materials. They underlined that the lecture materials provided by

school was restricted, unsufficient and hard to use. When asked to explain their material use, participants stated that net searching and information gathering don't have the access restriction in the system that their school present. Another words, when the education quality was perceived low, students showed a strategic or surface approach to the online learning.

All participants stated that the main reasons of taking online education were flexibility of time management, gaining independence, self-control and self-directed learning within the online learning system. This learning manner created some communication problems with instructors. For some participants, this approach was perceived a weak point of the online learning. They stressed that the direction and the level of online education must be allowed by instructors.

5. Recommendations and Conclusion

The findings of this study confirmed some past research results (Cotton, 2006; Armstrong, 2011 & Redmond, 2011). But, a more general study would provide additional data on students' perceptions of the online learning. This study was conducted in the summer academic session of 2012-2013 during the regular 14 weeks at Kocaeli vocational high school with 18 students. Perceptions of communication played an important role in the results of this study. Although this study conducted on students' perceptions of communication and observations of their actions within the online learning, actual communications were not evaluated.
The possible links between instructors use communications and the content and level of communications online should be analyzed in future studies.

In this study, we have investigated relationships between perception of the online learning, students' approach to online learning, and students' perceptions of online learning, the materials used in this learning. A more detailed investigation of student perceptions of online learning, including comparison of online learning and face to face learning, internet resources, and social networking could be made in the promotion of online learning. Although we mentioned internet resource and social networking in this study, they may play more powerful role in student online learning than was presented here.

The link between perception and outcome not investigated deeply in this study. When considering online education, a surface approach to link between perception and outcome may not be sufficient to understand the link. Comparing students' expectations from online teaching and use of communication technology in the online classroom could be useful for future studies on student perceptions of online learning. Additional factors not investigated in this study are for online learning, the position of online learning in the future plan of universities, the learning and teaching standards of online education.

In this study, Participants' statements about response time of any activity were not intended during data collection. All participants stated that teachers and students were unresponsive to define a precise time for any activity. Investigating what is an appropriate response time for discussions and assignments should be searched in another study.

Investigating the link between school personal training in the use of the developments for online education and student perception and outcomes is not sufficient. Participants clearly stated that say they want in an online course and the standards as written into newest online teaching models. This model should be including more and faster communication, more connection between students and online education stuff. An investigation of the effects of this model on perception, approach, and outcome may provide a better understanding of how best to design online education.

References

Acton, T. Scott, M. & Hill, S. (2005). E-Education – Keys to Success for Organizations. 18th Bled eConference eIntegration in Action. Bled, Slovenia, Available from: http://www.bledconference.org/proceedings.nsf

Armstrong, A. D. (2011). Students' perceptions of online learning and instructional tools: a qualitative study of undergraduate students use of online tools. *The Turkish Online Journal of Educational Technology,10(3),* 222-226.

Biggs, J. (1987). Student approaches to learning and studding: study process questionnaire: Manual.Melbourne: Australian Council for Educational Research.

Entwistle, N., & Ramsden, P. (1983). *Understanding Student Learning*. New York: Nichols

Govindasamy, T. (2001). Successful implementation of e learning: pedagogical considerations. *The Internet and Higher Education. 4(3*), 287-299.

Laurillard, D. (2002). Rethinking teaching for the knowledge society. *Education Review, 37(1),* 16-25.

Menchaca, M., & Bekele, T. (2008). Leaner and instructor identified success factors in distance education. *Distance Education, 29(3),* 231-252.

Redmond, P. (2011). From face-to-face teaching to online teaching: Pedagogical transitions. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions*. (pp.1050-1060). Hobart: . E- Publishing Inc.

Smith, G. & Ferguson, D. (2002). Teaching over the web verses in the classroom: differences in the instructor experience. *International Journal of Instructional Media, 29(1),* 61-67.

Spender, D. (2001). E-learning: are schools prepared? *Proceedings of the Annual Washington Conference on e-learning in a Borderless Market*, (pp. 21-33).

Wojnar, L. (2002). Research summary of a best practice model of online teaching and learning. *English Leadership Quarterly, 25(1),* 2-9.